

Output cell

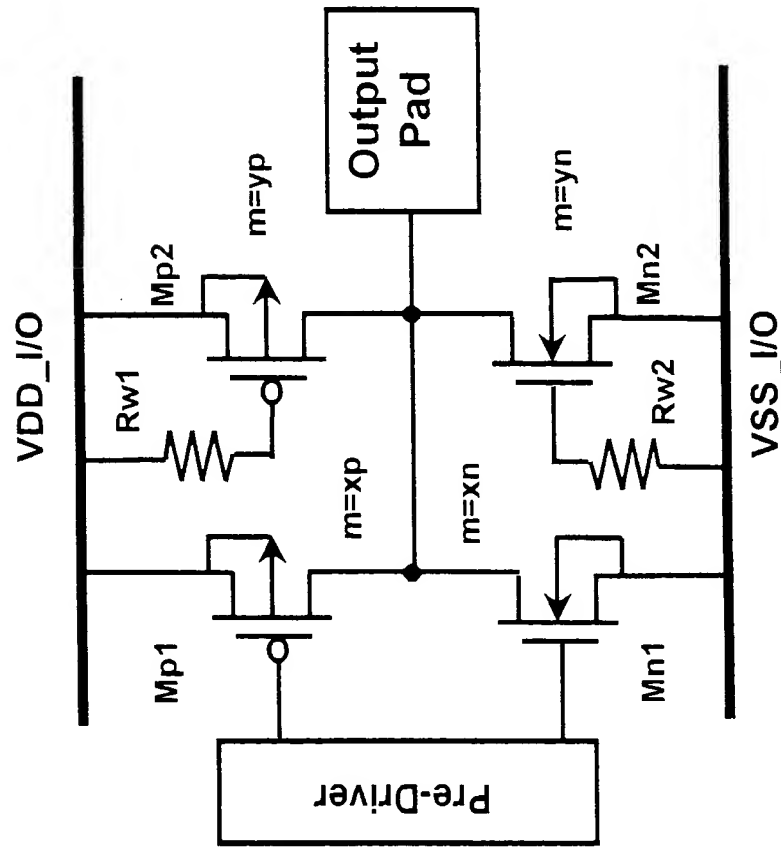


Fig.1(a)
Prior Art

Input cell

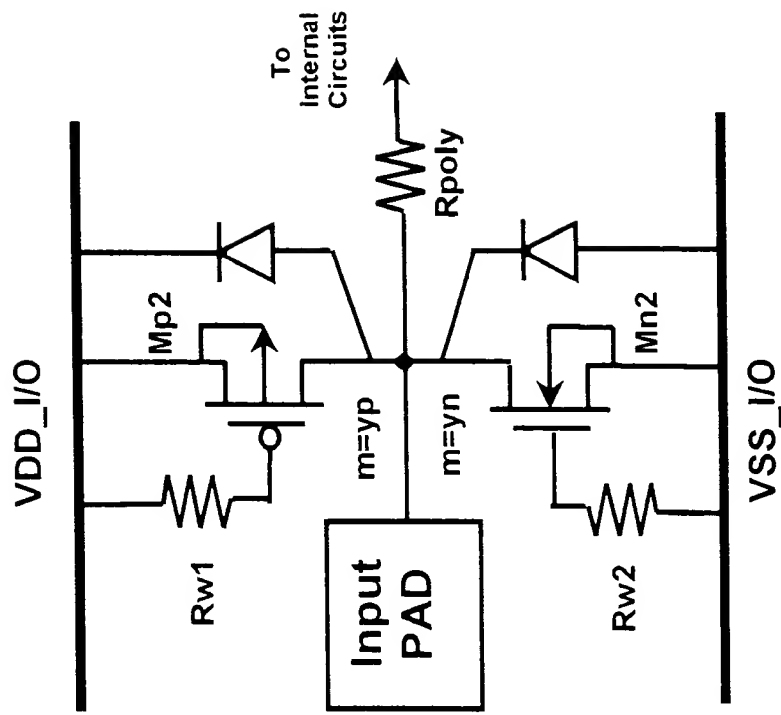


Fig.1(b)
Prior Art

Bi-directional cell

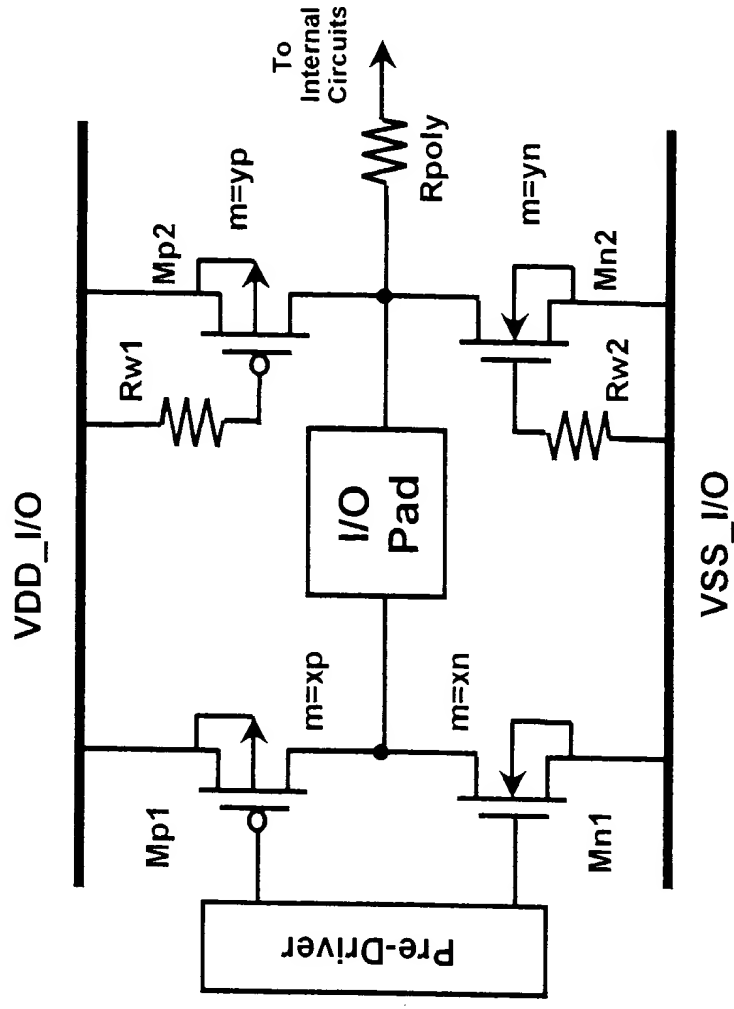


Fig.1(c)
Prior Art

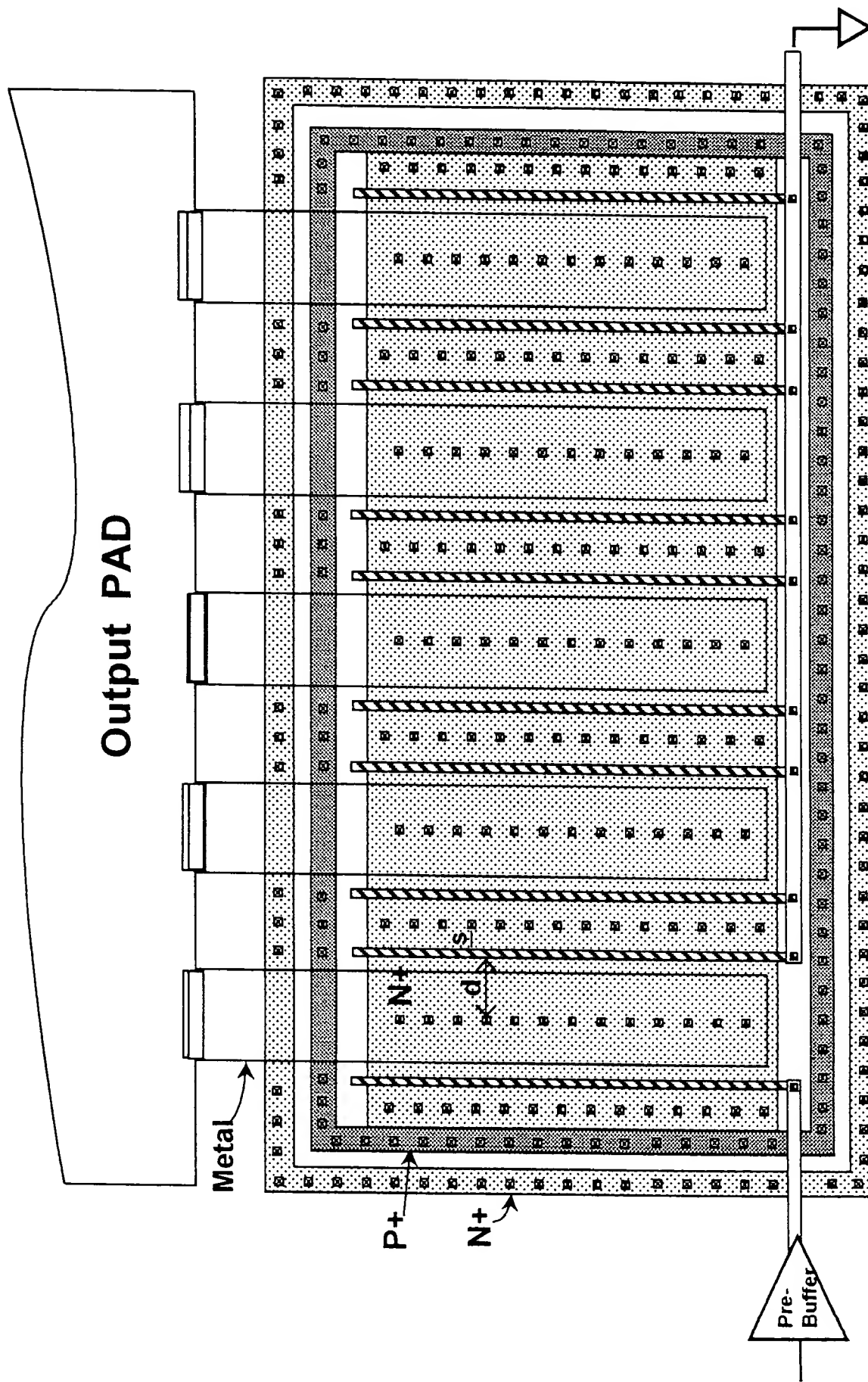


Fig.2(a)
Prior Art

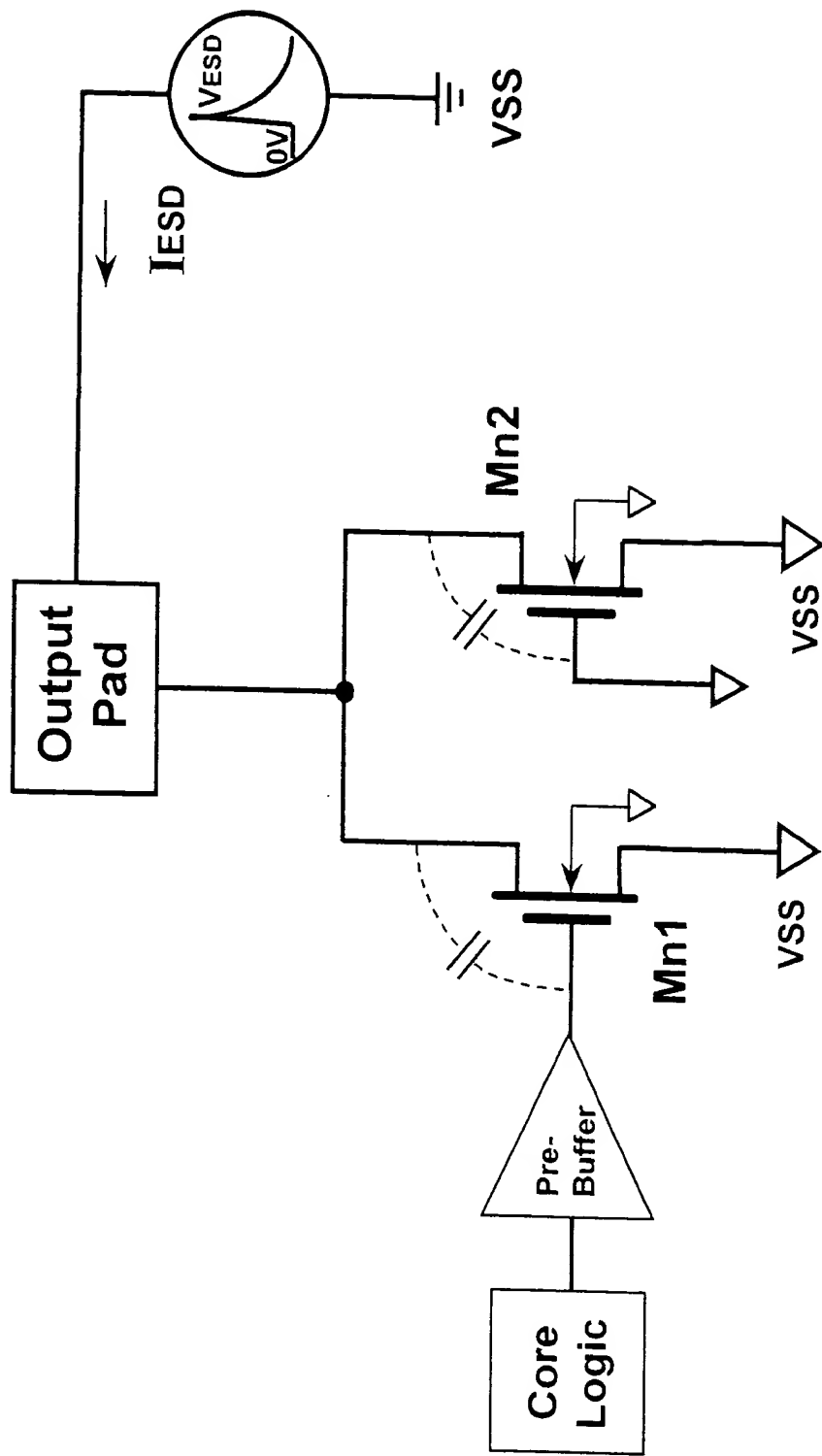


Fig.2(b)

Prior Art

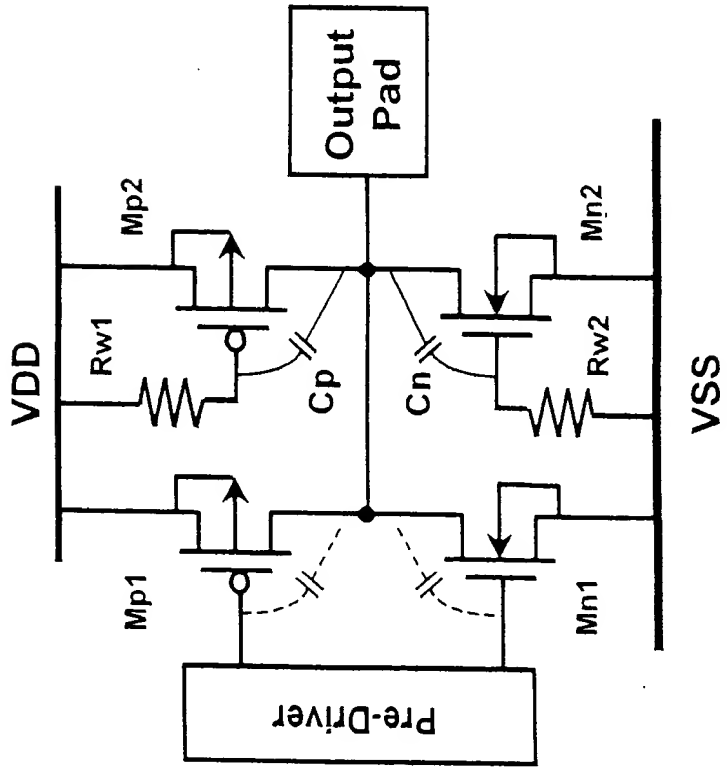


Fig.3
Prior Art

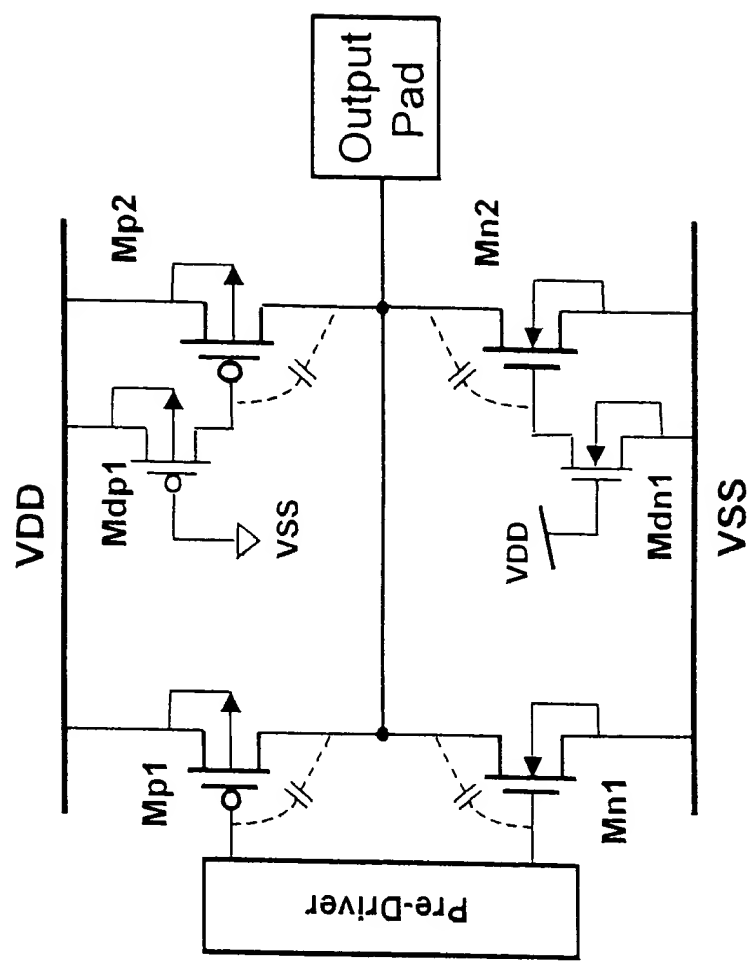


Fig.4
Prior Art

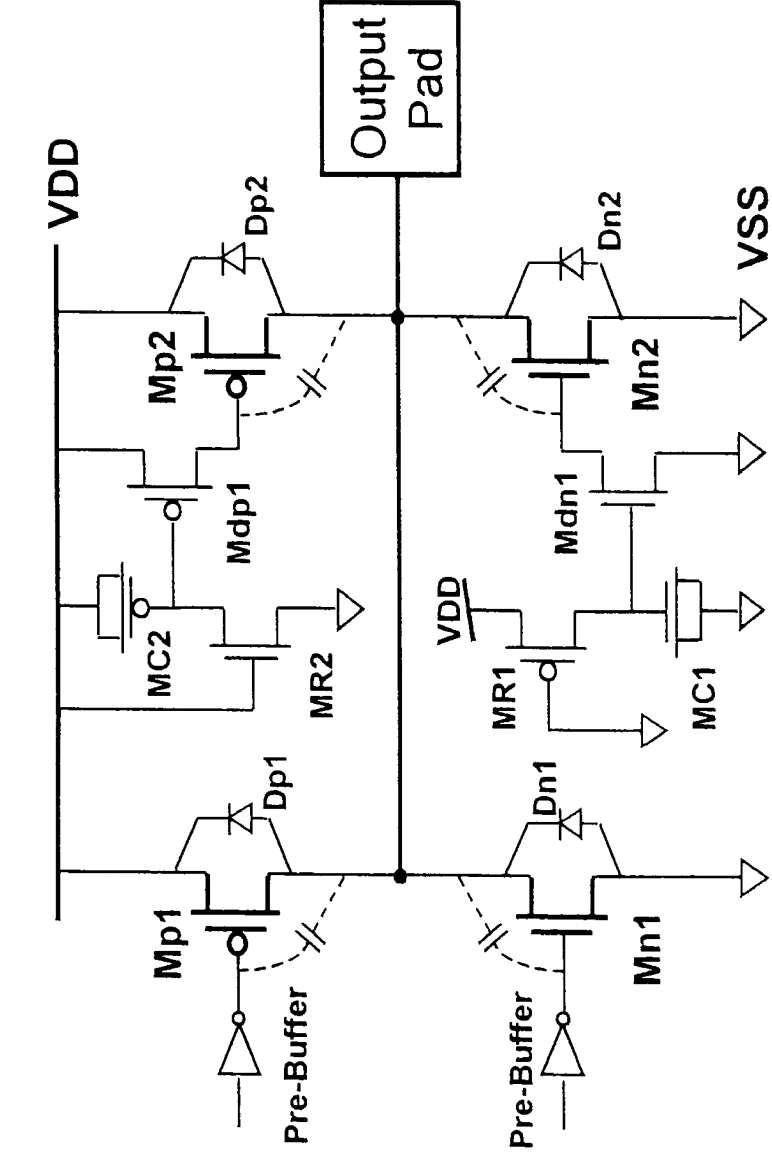


Fig.5
Prior Art

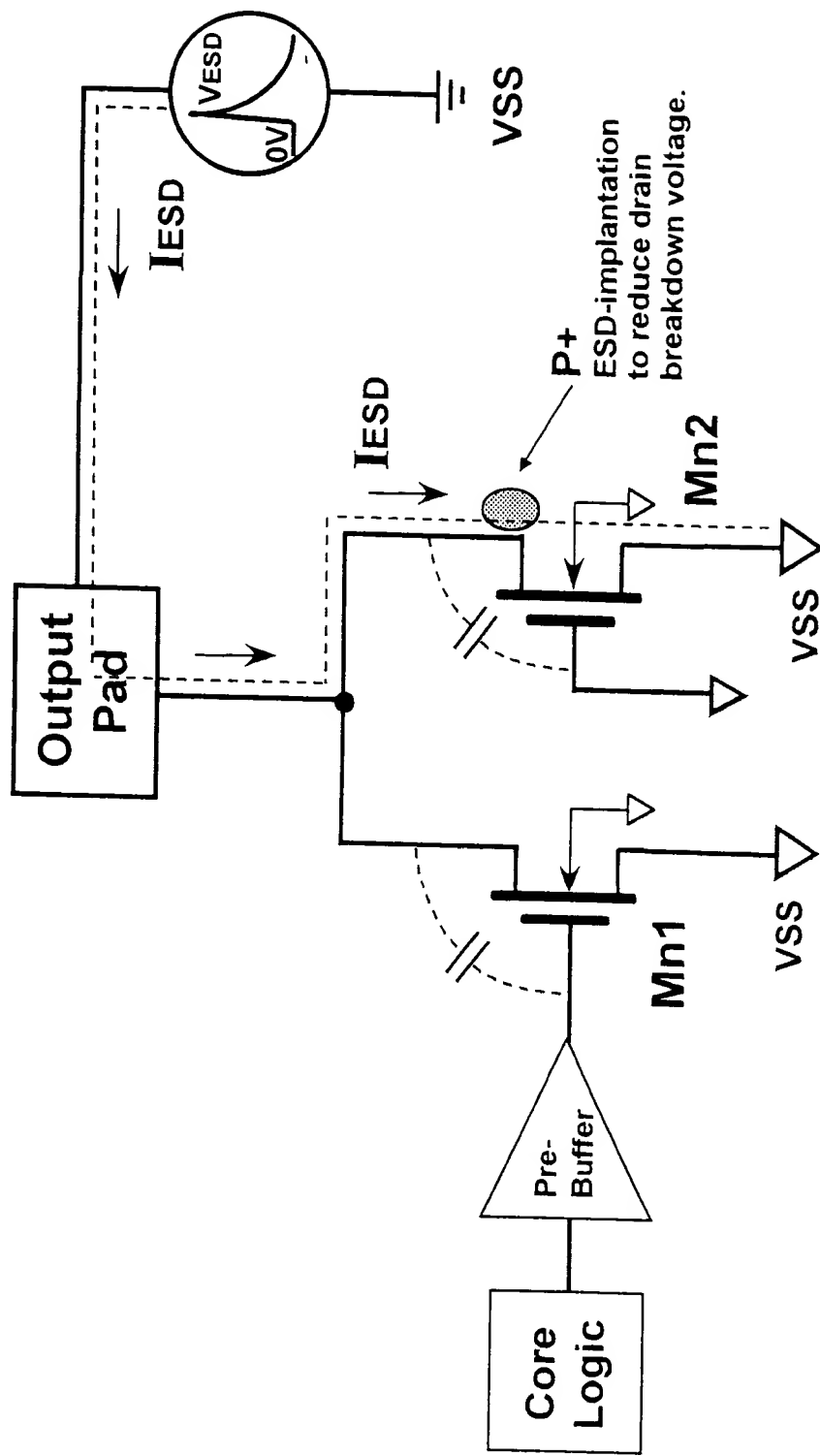


Fig.6(a)

Prior Art

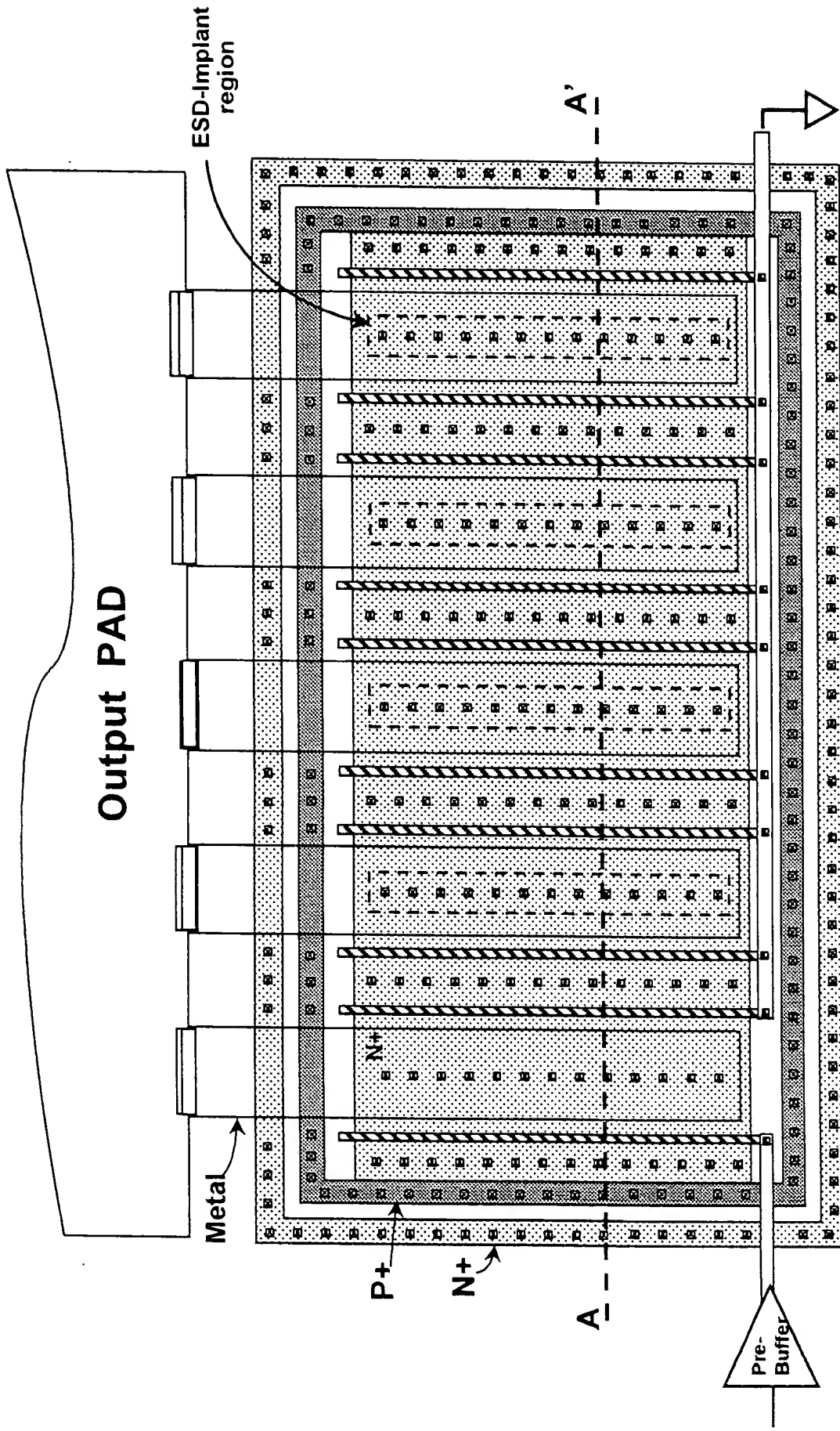


Fig.6(b)
Prior Art

FIG. 6(c) 452E.650

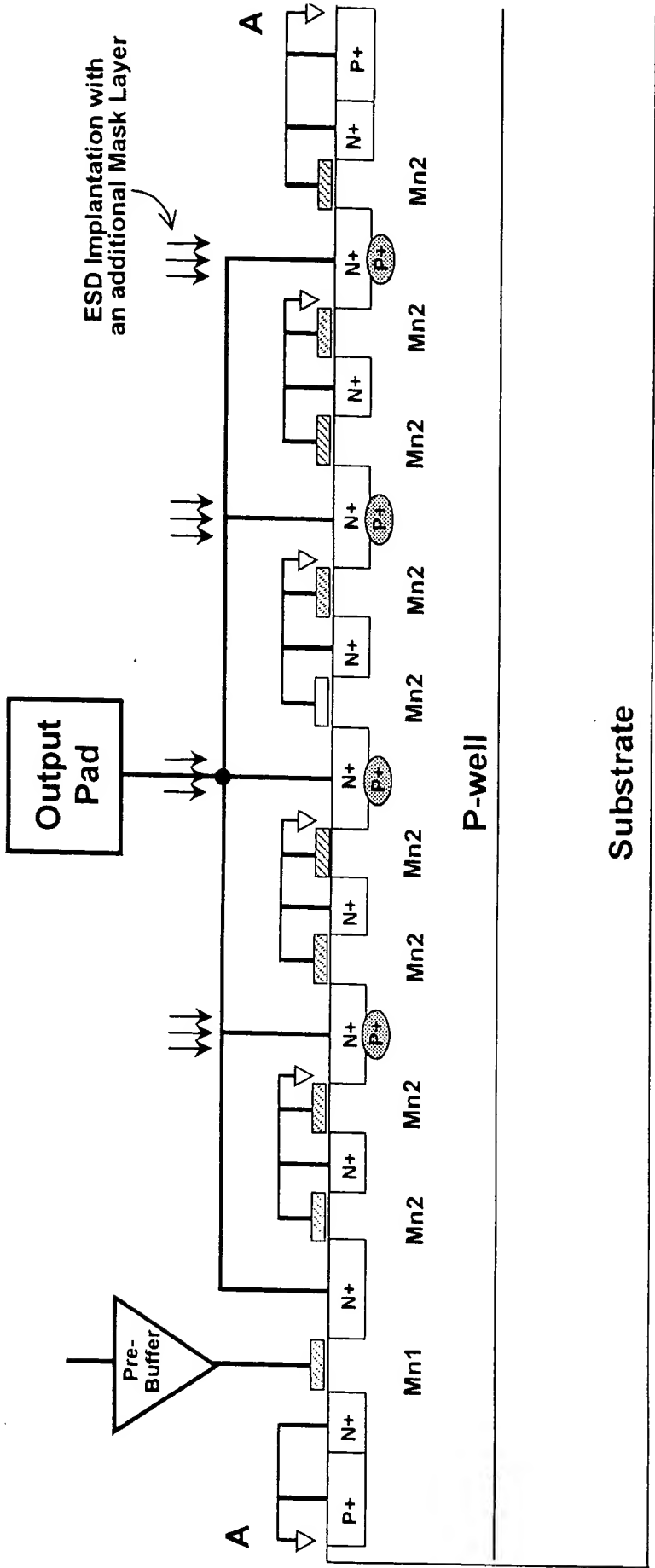


Fig.6(c)
Prior Art

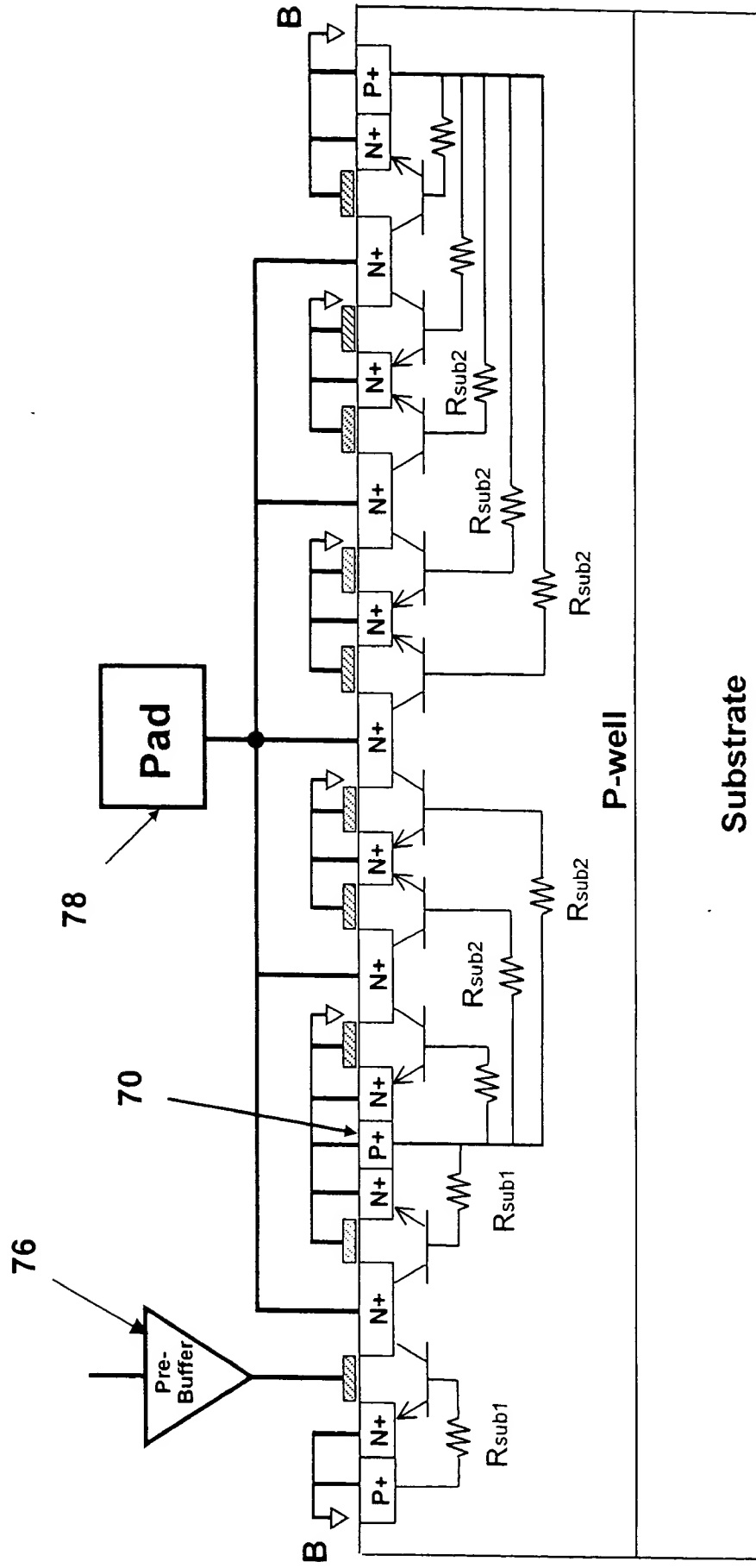


Fig.7(a)

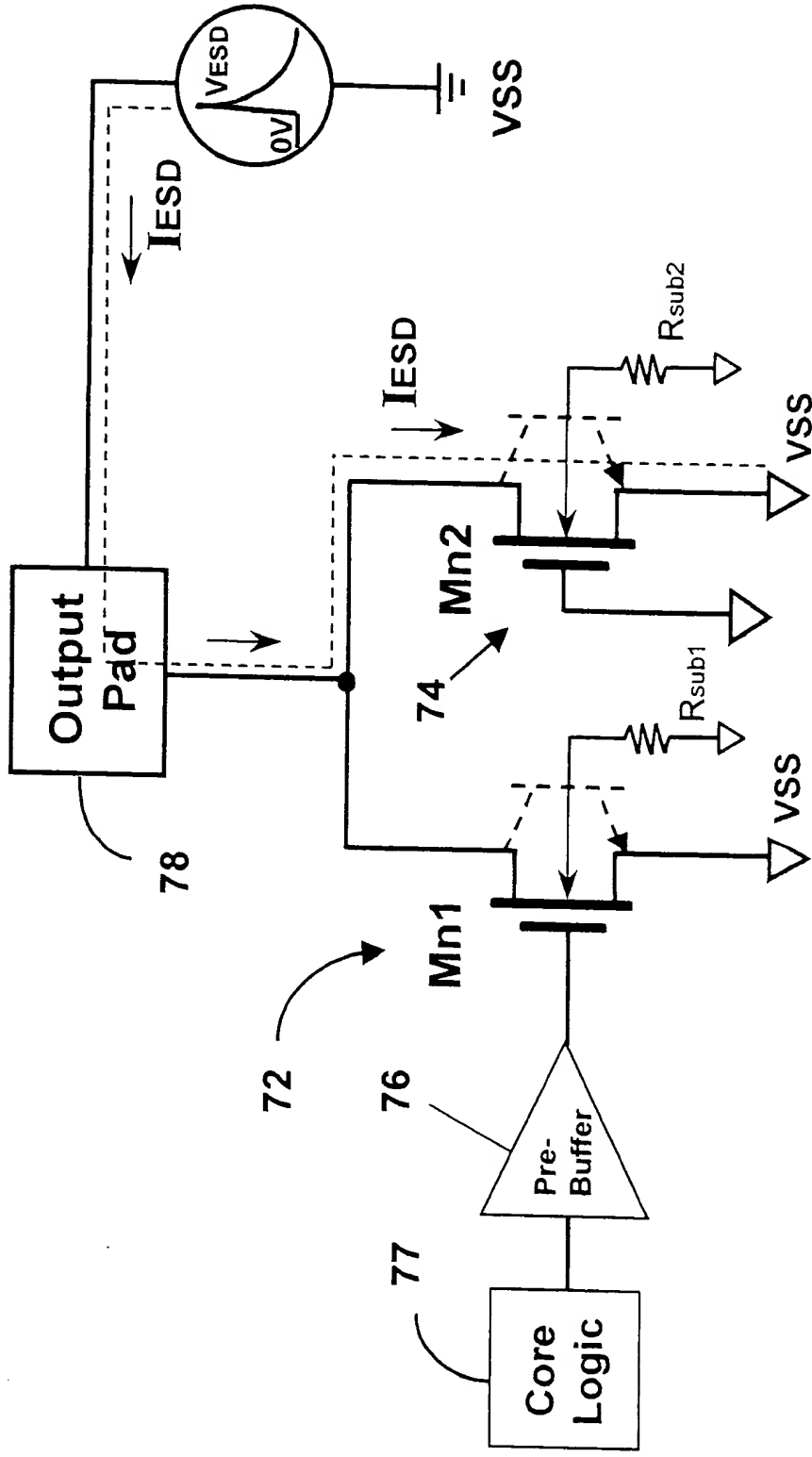


Fig. 7(b)

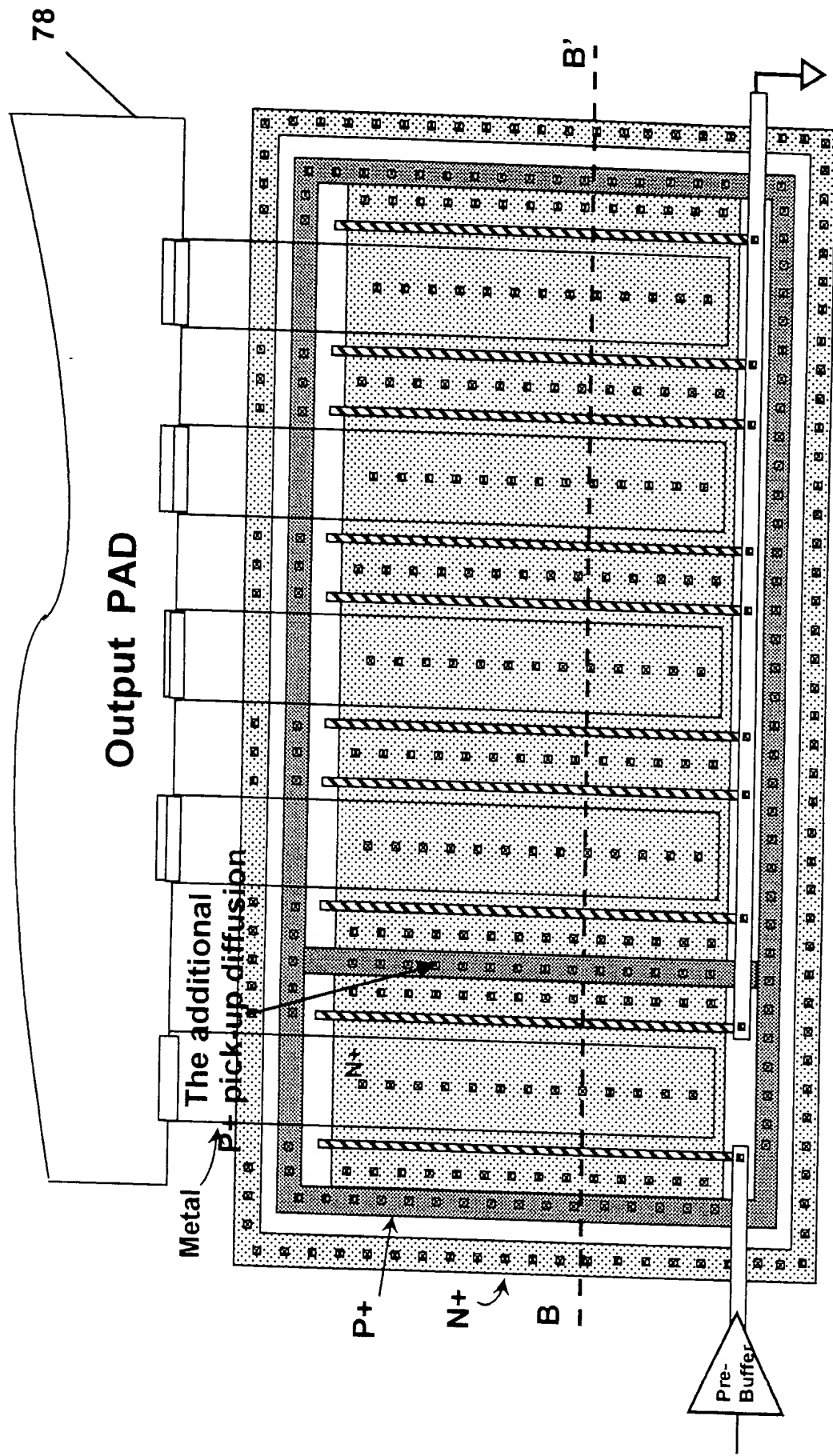


Fig.7(c)

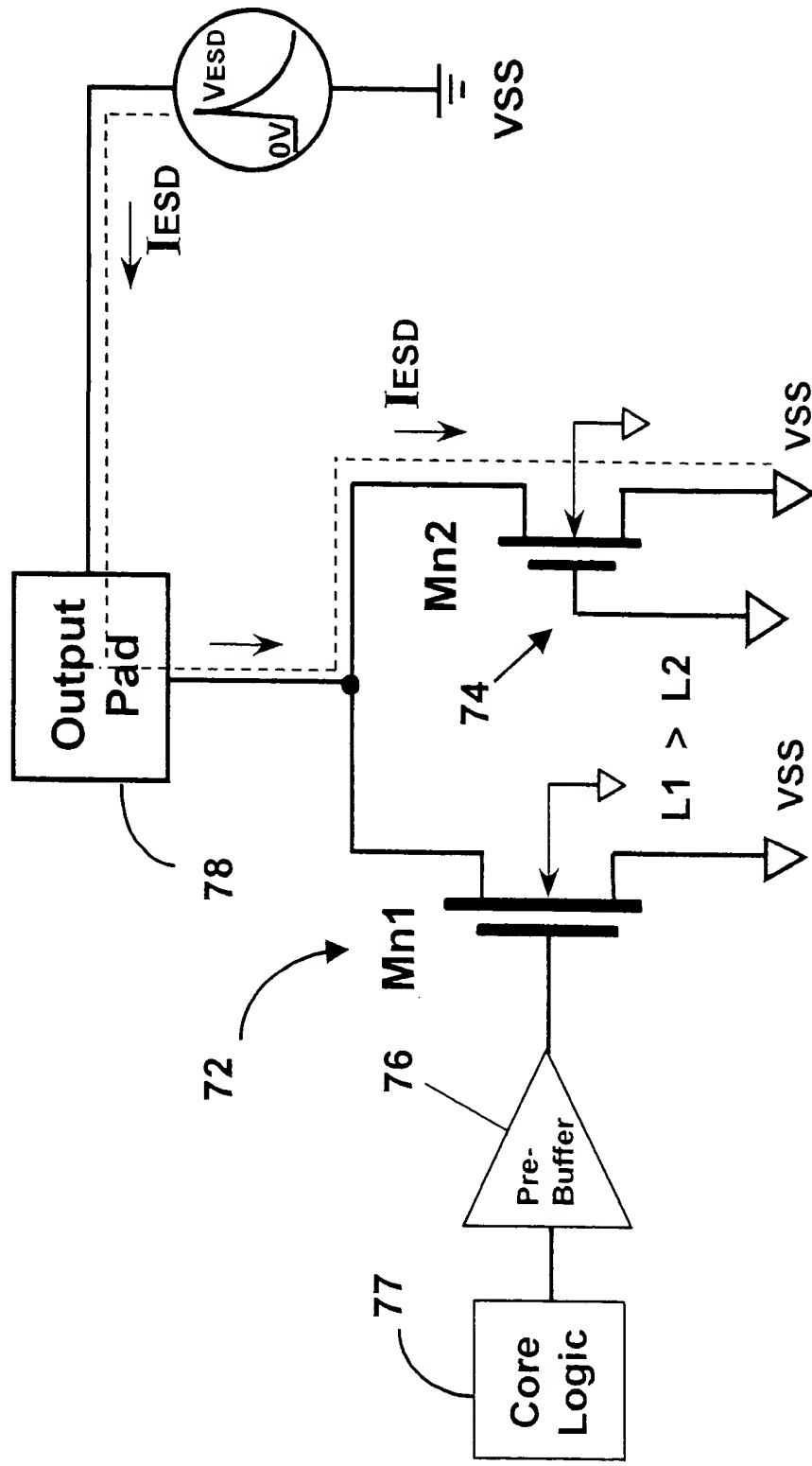


Fig. 8(b)

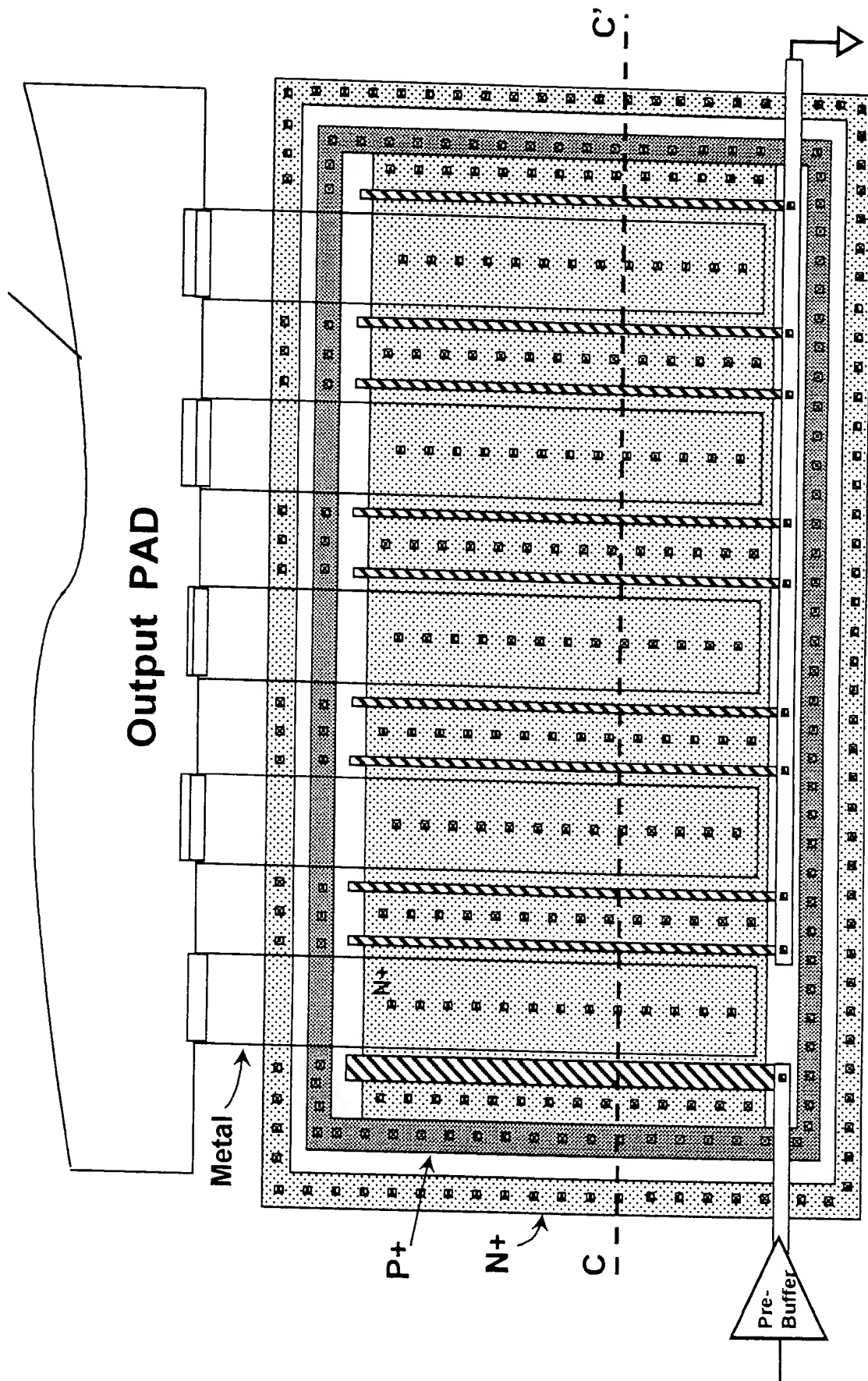


Fig.8(c)

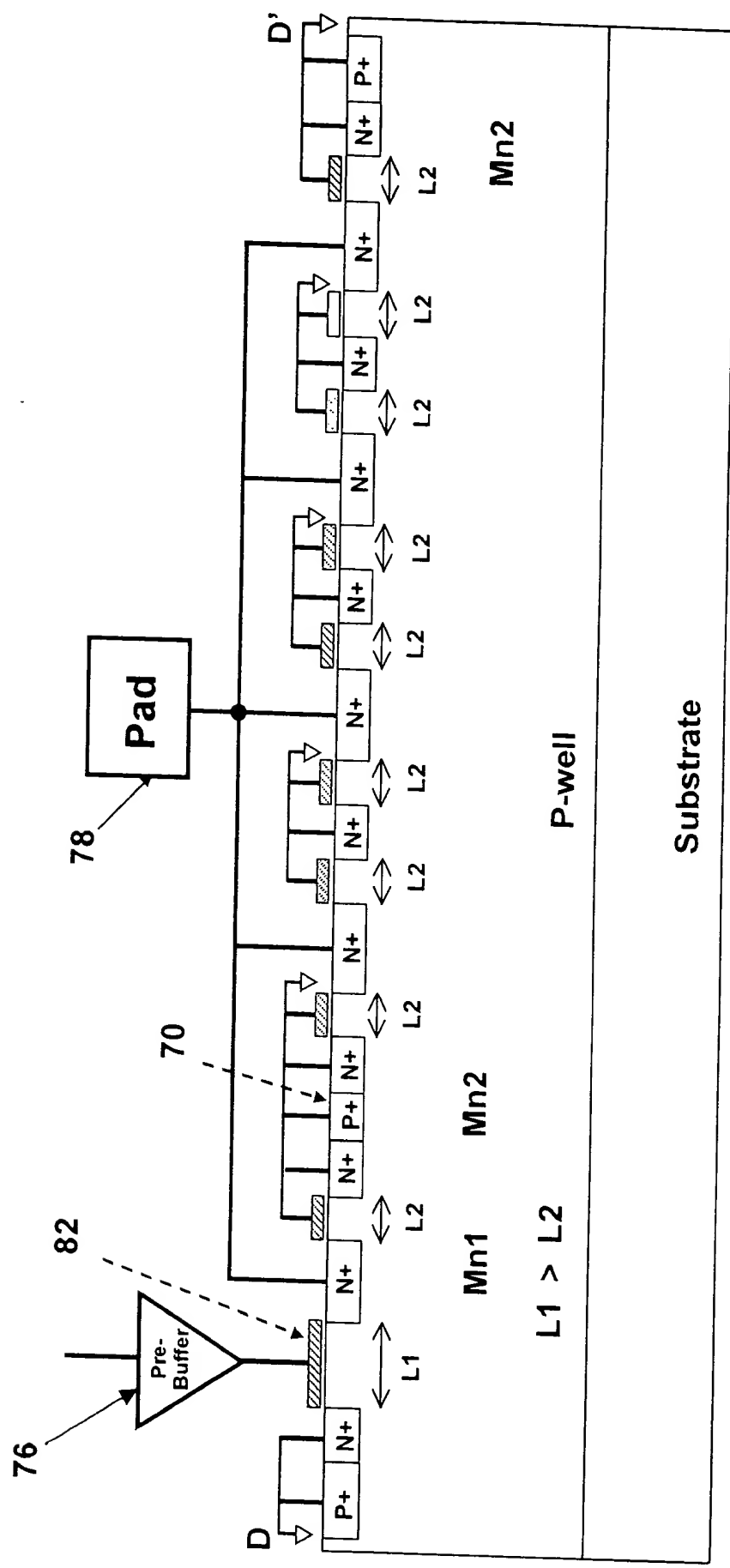


Fig.9(a)

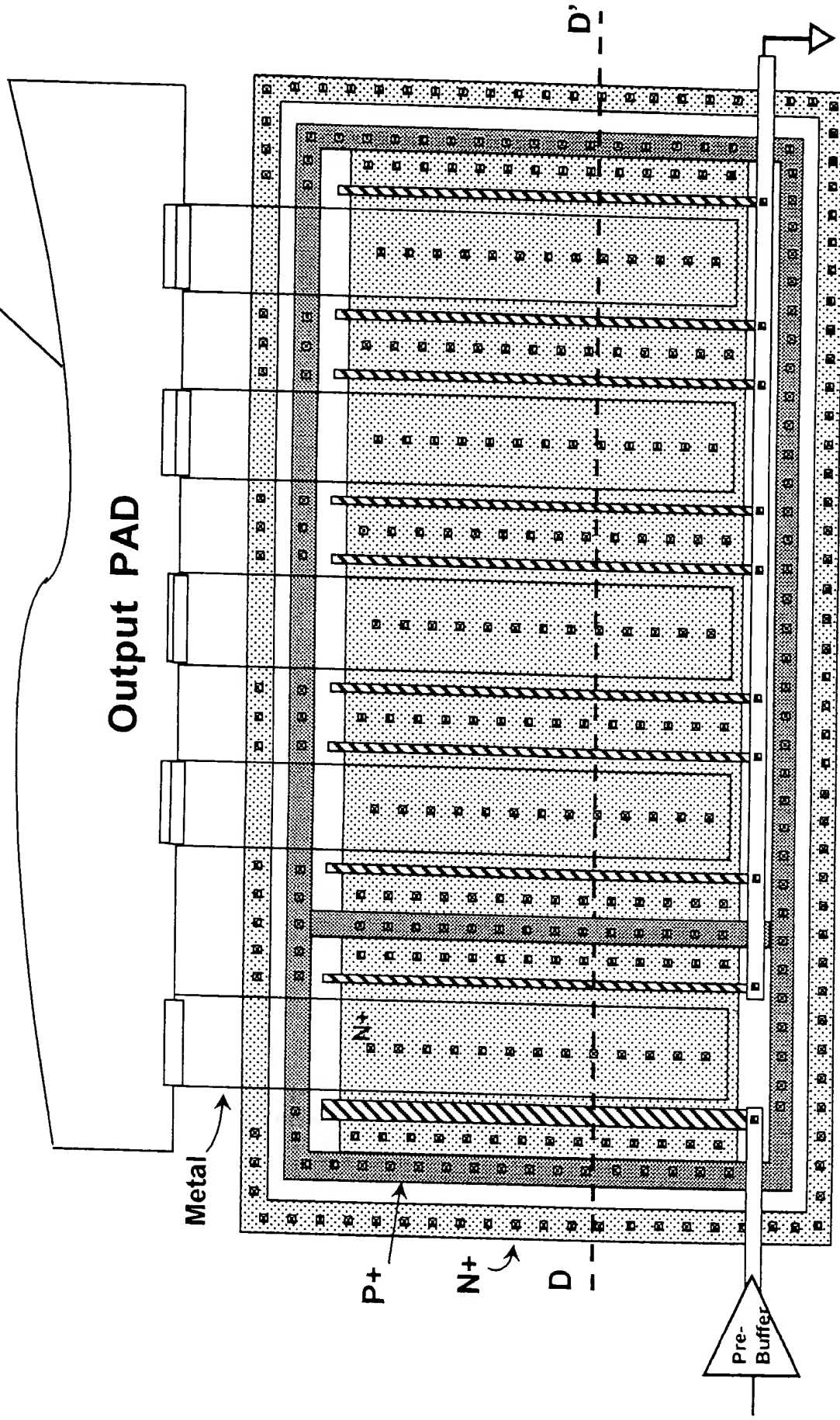


Fig. 9(b)

Input cell

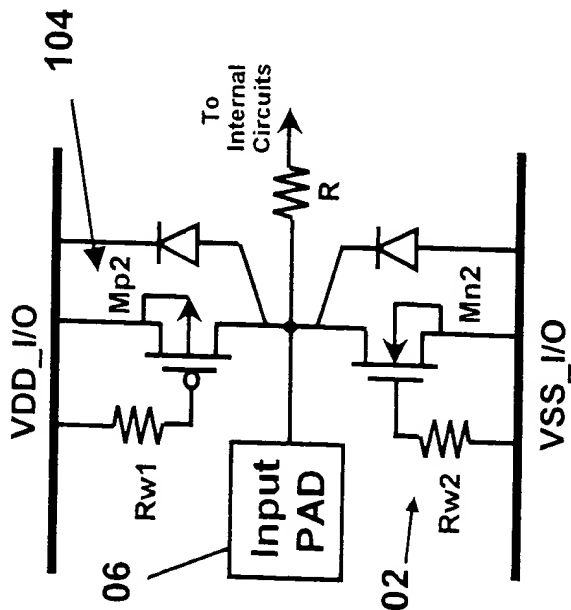


Fig.10(a)

Layout of Mn2 in the Input cell

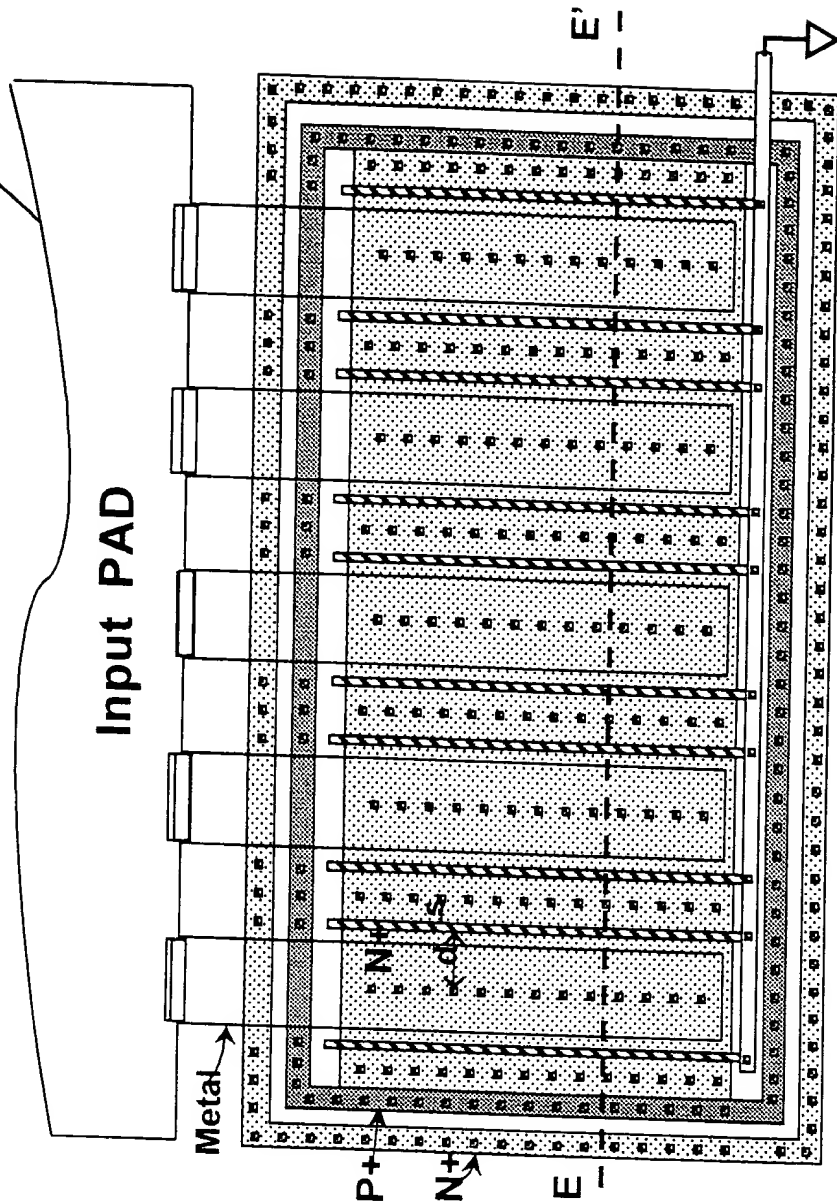


Fig.10(b)

106

Input PAD

Metal

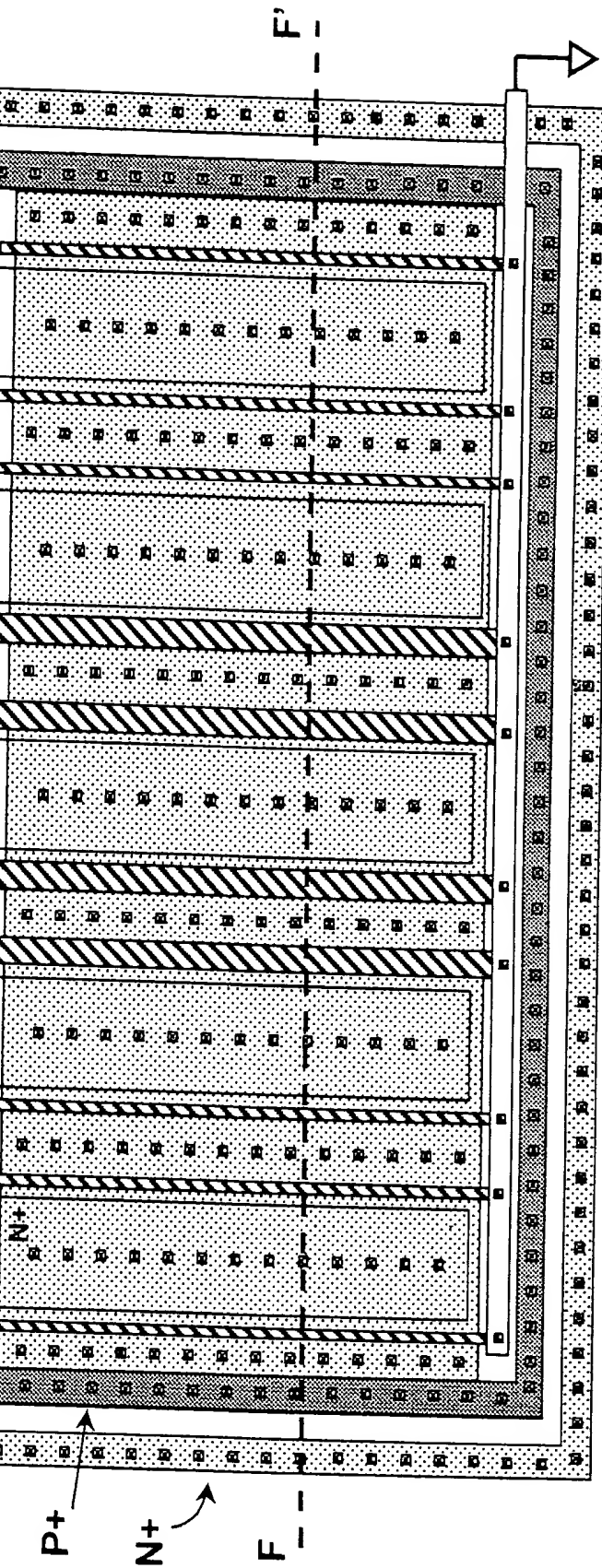


Fig.11(a)

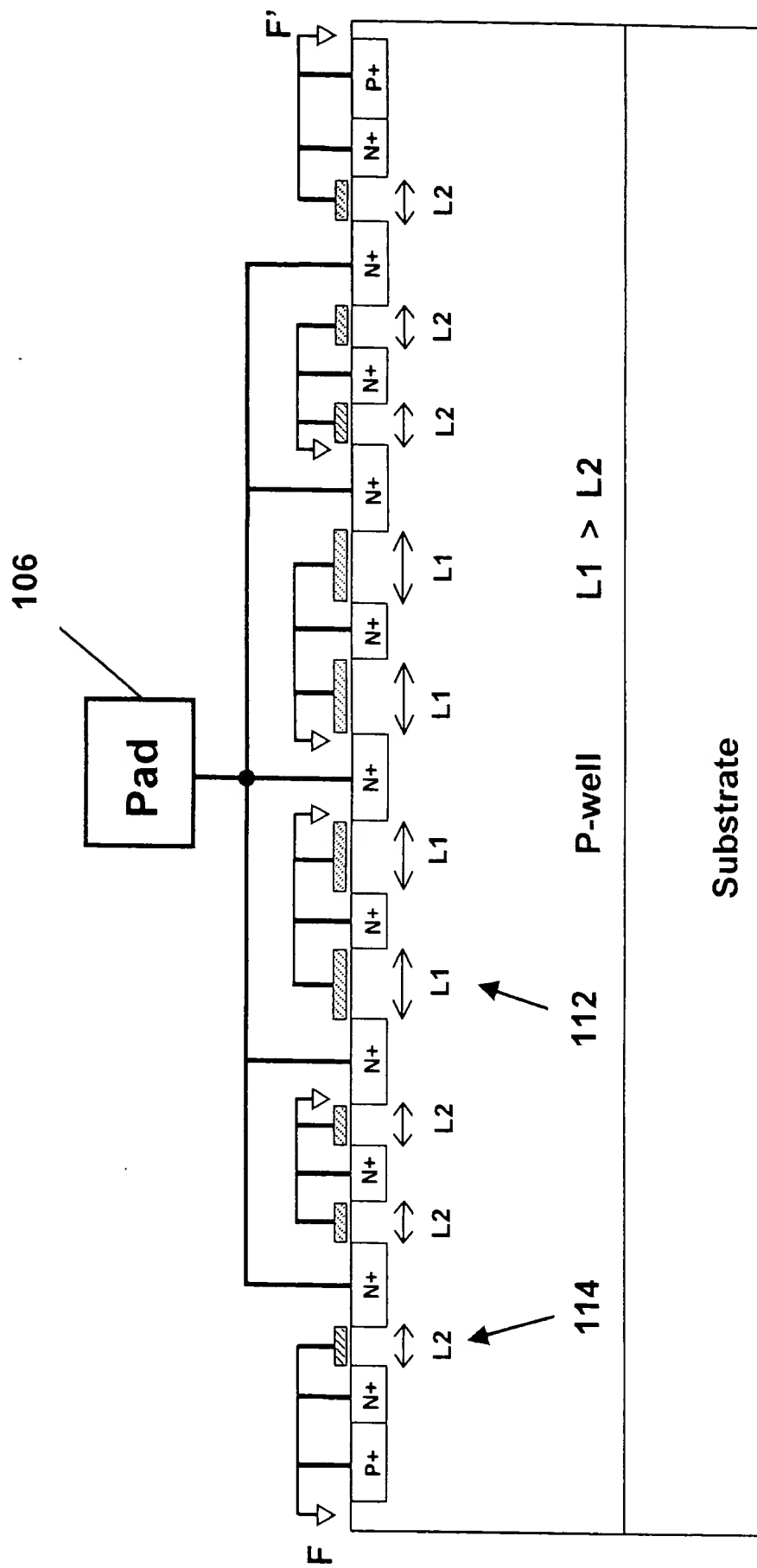


Fig. 11(b)

106

Input PAD

Metal

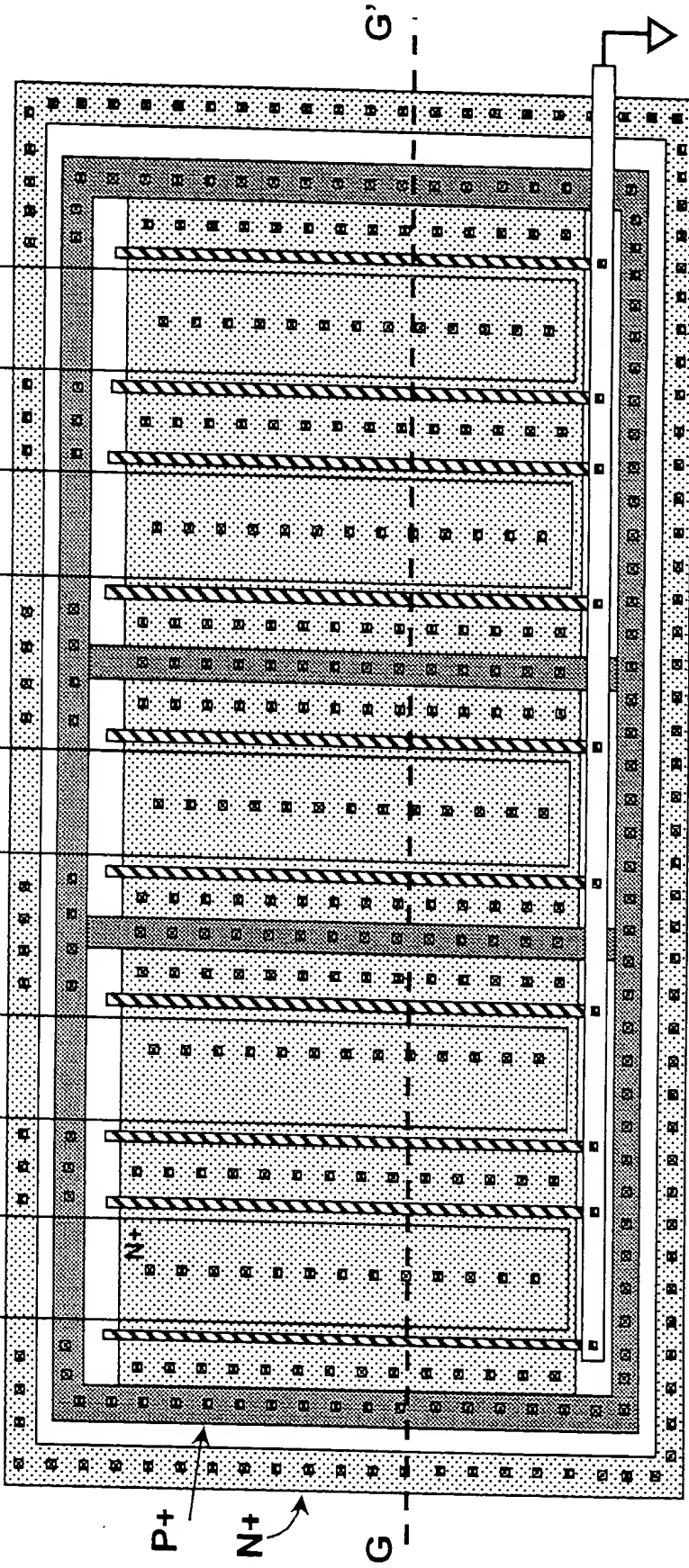


Fig.12(a)

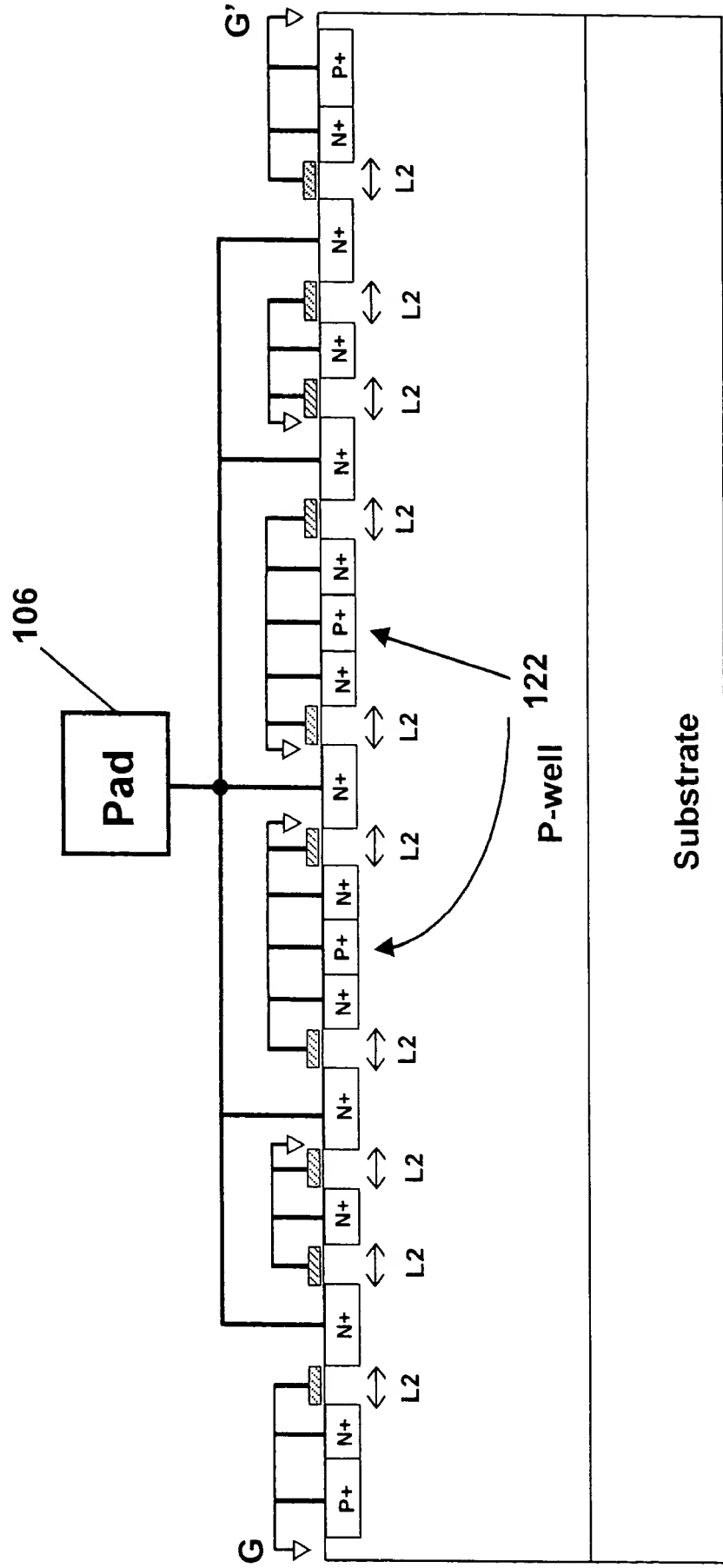


Fig.12(b)

106

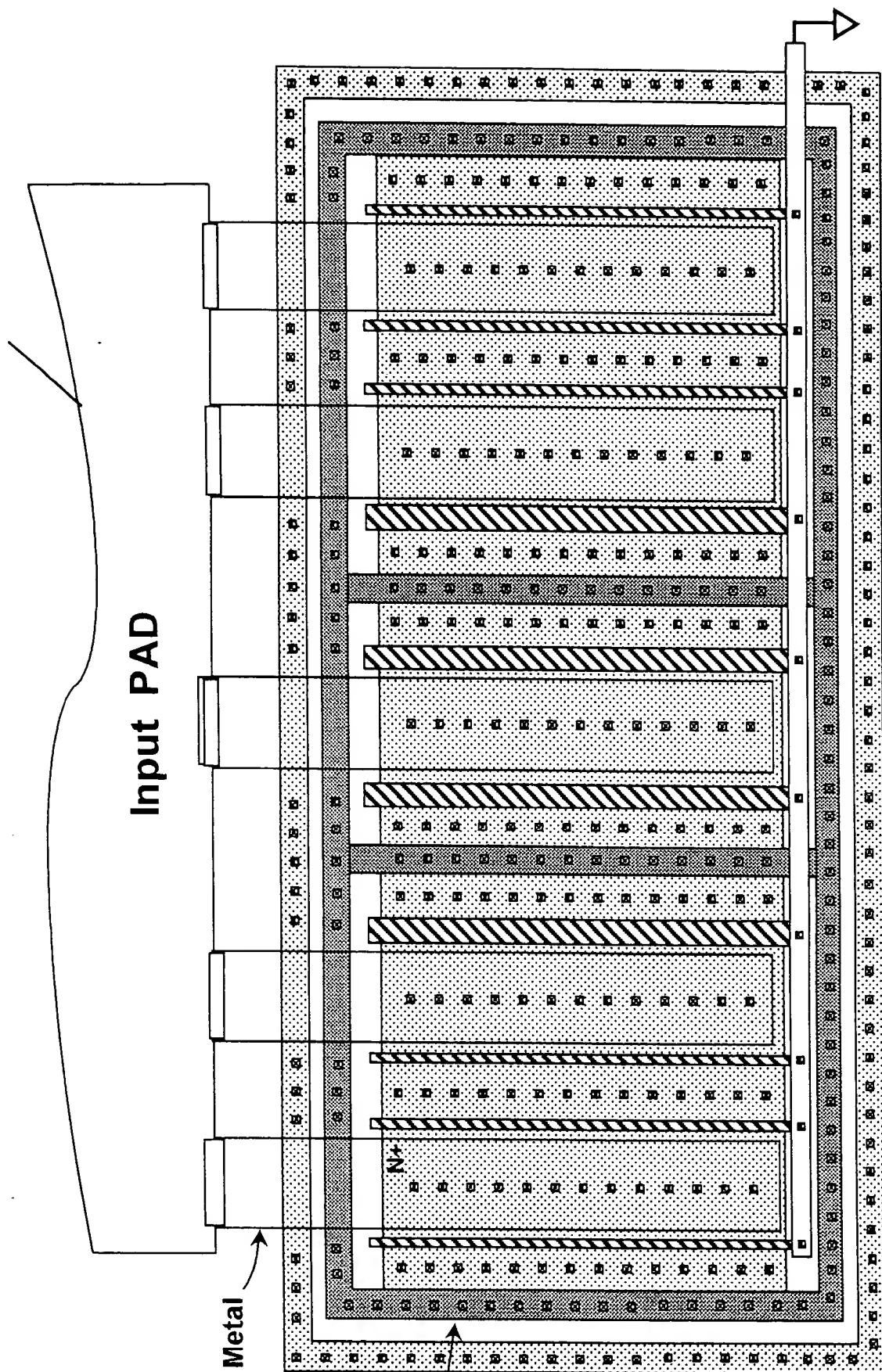
Input PAD

Metal

P+

N+

Fig.13



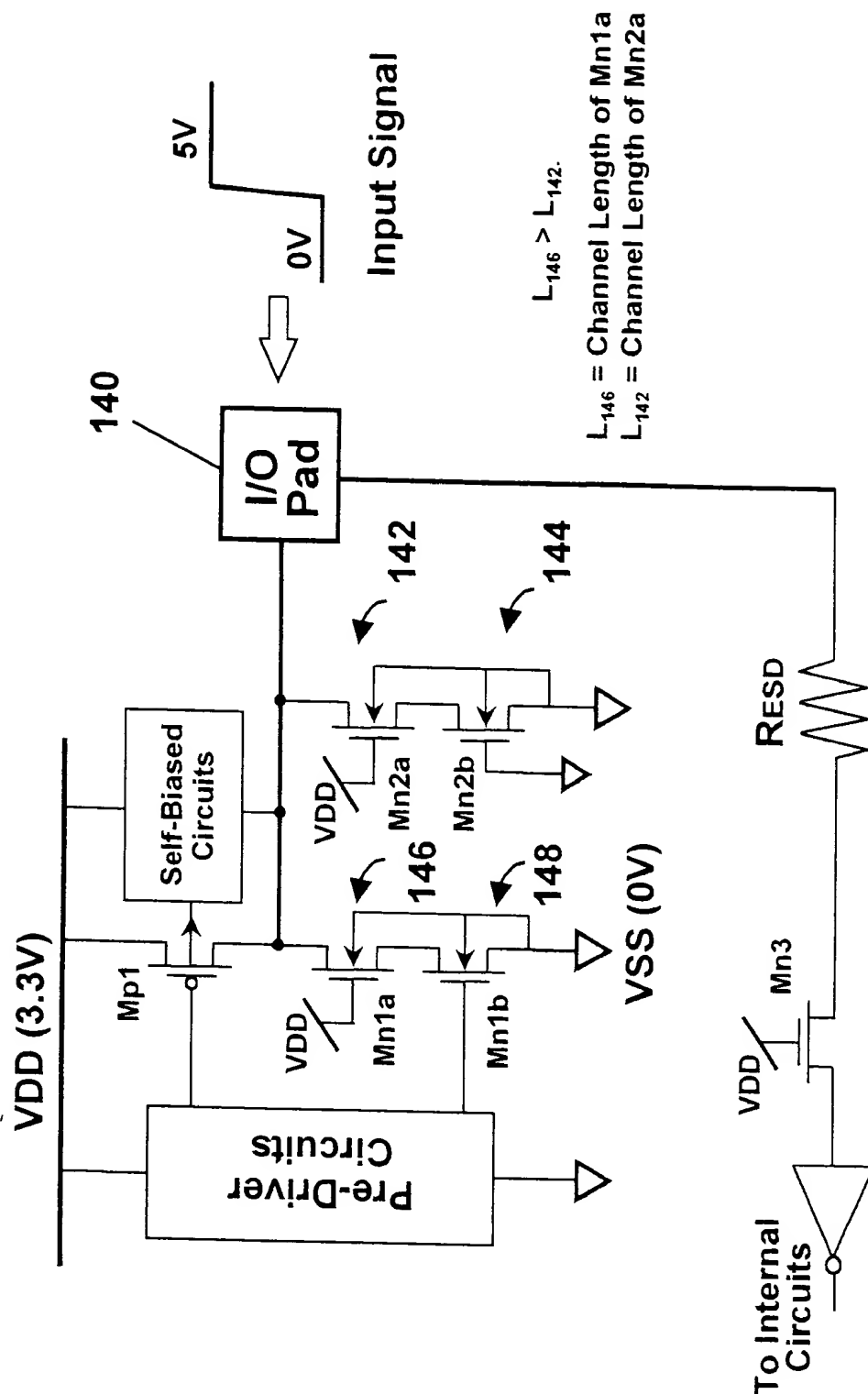


Fig.14(a)

140

I/O PAD

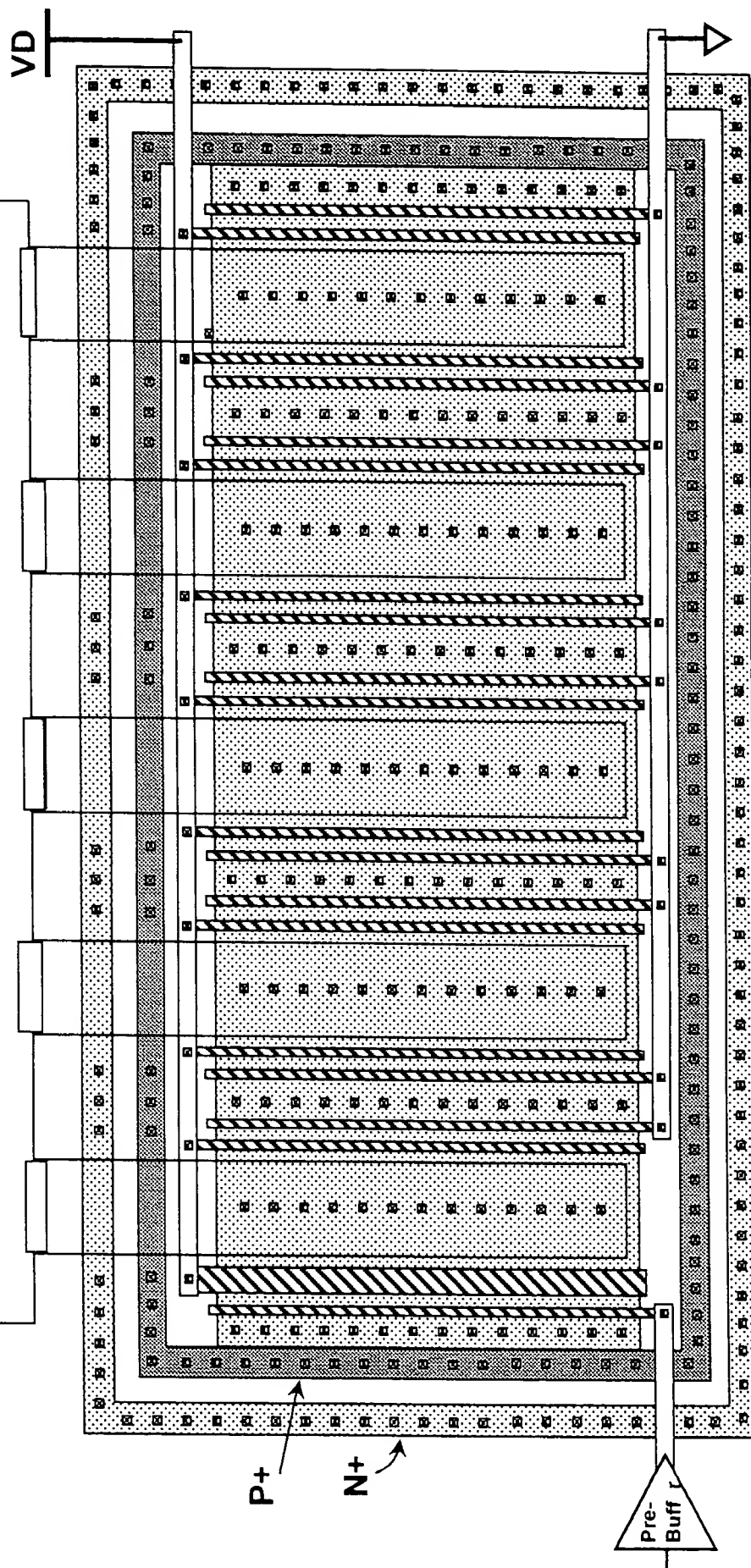


Fig.14(b)